

$R(27) \pmod{7}$

	blocks	defect	matrix
$G :$	1	1	7×6
	2	1	5×2
	3	0	$2184_1 = \chi_7, \varphi_7$
	$4 = \bar{3}$	0	$2184_2 = \chi_8, \varphi_8$
	5	0	$13832_1 = \chi_9, \varphi_9$
	6	0	$13832_2 = \chi_{10}, \varphi_{10}$
	7	0	$13832_3 = \chi_{11}, \varphi_{11}$
	8	0	$13832_4 = \chi_{12}, \varphi_{12}$
	9	0	$13832_5 = \chi_{13}, \varphi_{13}$
	10	0	$13832_6 = \chi_{14}, \varphi_{14}$
	11	0	$19684_1 = \chi_{21}, \varphi_{17}$
	12	0	$19684_2 = \chi_{22}, \varphi_{18}$
	13	0	$19684_3 = \chi_{23}, \varphi_{19}$

	blocks	defect	matrix
	14	0	$19684_4 = \chi_{24}, \varphi_{20}$
	15	0	$19684_5 = \chi_{25}, \varphi_{21}$
	16	0	$19684_6 = \chi_{26}, \varphi_{22}$
	17	0	$19684_7 = \chi_{27}, \varphi_{23}$
	18	0	$19684_8 = \chi_{28}, \varphi_{24}$
	19	0	$19684_9 = \chi_{29}, \varphi_{25}$
	20	0	$19684_{10} = \chi_{30}, \varphi_{26}$
	21	0	$19684_{11} = \chi_{31}, \varphi_{27}$
	22	0	$19684_{12} = \chi_{32}, \varphi_{28}$
	23	0	$26936_1 = \chi_{33}, \varphi_{29}$
	24	0	$26936_2 = \chi_{34}, \varphi_{30}$
	25	0	$26936_3 = \chi_{35}, \varphi_{31}$

Block 1:	φ_1	φ_3	φ_4	φ_5	φ_6	φ_{15}
$1_1 = \chi_1$	1	.	.	.	.	.
$741_1 = \chi_3$	.	1	.	.	.	.
$741_2 = \chi_4$	.	.	1	.	.	.
$1443_1 = \chi_5$	.	.	.	1	.	.
$1443_2 = \chi_6$	.	.	.	.	1	.
$18278_1 = \chi_{15}$	.	1	1	.	.	1
$19683_1 = \chi_{20}$	1	.	.	1	1	1

$$\begin{aligned}
 \varphi_1 &= 1_1 \\
 \varphi_3 &= 741_1 \\
 \varphi_4 &= 741_2 \\
 \varphi_5 &= 1443_1 \\
 \varphi_6 &= 1443_2 \\
 \varphi_{15} &= 16796_1
 \end{aligned}$$

Block 2:	φ_2	φ_{16}
$703_1 = \chi_2$	1	.
$18278_2 = \chi_{16}$	.	1
$18278_3 = \chi_{17}$	.	1
$18278_4 = \chi_{18}$	.	1
$18981_1 = \chi_{19}$	1	1

$$\begin{aligned}
 \varphi_2 &= 703_1 \\
 \varphi_{16} &= 18278_1
 \end{aligned}$$